ABSTRACT OF THE DISCLOSURE

The system and method of the invention provide a method of compressing and decompressing an image by dividing the image into slices and utilizing memory manipulation to enhance the processing of the slices. The method utilizes the presence in an image of a

5   certain gray level or color level remaining constant over a portion or portions of the image. Illustratively, when processing a two-dimensional image W*H, such an image may be divided into slices of dimension w*h. Each slice is represented in the form of a slice-value. In processing slices represented by a slice-value, the contents of the memory are searched for a match. The slice-value may then be encoded using the address in the memory, if a match is

10   present in the memory. The content and organization of the memory may be changed and/or reorganized depending on whether a match is found and at what location in the memory the match is found. Illustratively, the memory may be a cache memory. Additionally, the system and method of the invention, which provide rapid compression and decompression, may be readily used in conjunction with Huffman or run-length compression process, for

15   example, as well as other compression processes.